REMARKS/ARGUMENTS

Re-examination and favorable reconsideration in light of the above amendments and the following comments are respectfully requested.

Claims 2 - 21 are pending in the application. Currently, no claim has been allowed.

By the present amendment, claims 2 - 4, 6 and 21 have been amended and claim 17 has been cancelled.

In the office action mailed December 17, 2004, claims 2 - 5 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,569,508 to Cundiff; claims 6 - 18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Cundiff in view of U.S. Patent No. 5,762,145 to Bennett or U.S. Patent No. 4,767,656 to Chee et al. or U.S. Patent No. 5,251,849 to Torres; claims 19 and 20 were rejected under 35 U.S.C. 103(a) as being unpatentable over ordinary skill in the art; and claim 21 was rejected under 35 U.S.C. 103(a) as being unpatentable over Cundiff in view of Torres, or Bennett, or Chee et al.

The foregoing rejections are traversed by the instant response.

The present invention broadly relates to a self extinguishing composite primary structure comprising a core formed from an open cell and a thermal insulating material, which core comprises a plurality of honeycomb cells filled with a fire resisting material such as a fiberglass material and has a first surface and a second surface. At least one ply of a structural graphite prepeg material bonded to each of the first and second surfaces. Each ply is bonded to each of the first and second surfaces by an epoxy structural film adhesive.

The present invention also broadly relates to a helicopter comprising at least one component formed from a self

extinguishing composite material. The self extinguishing composite material comprises a core formed from a fire resisting material, which core comprises a plurality of honeycomb cells filled with the fire resisting material such as fiberglass material. The core has a first surface and a second surface, and at least one ply of a structural graphite prepreg material bonded to each of the first surface and the second surface.

With regard to the rejection of claims 2 through 5 on anticipation grounds, the Cundiff patent does not teach or suggest the composite primary structure set forth in claims 2 and 3. In particular, Cundiff does not teach or suggest providing a core whose cells are filled with either a fire resisting material or a fiberglass material. Cundiff is clearly directed to having a composite structure with a honeycomb cell core whose cells are filled with a foam material. There is no disclosure in Cundiff that the foam material is fire resistant or fire retardant. Applicants have reviewed the portions of the Cundiff patent cited by the Examiner and can not find any disclosure of the subject matter being claimed in claims 2 and 3.

Further, Cundiff does not teach or suggest using the claimed epoxy structural film adhesive. The Examiner's comments on page 2 of the office action are duly noted; however, what the Examiner says is not correct. Not every epoxy adhesive is an epoxy structural film adhesive. An epoxy structural film adhesive must have certain strength properties which are repeatable and must have engineering properties which mirror the properties of the materials forming the composite structure. This is necessary if the composite structure is to be used for the disclosed elements of a helicopter. Absent a specific teaching in Cundiff of the claimed feature, Cundiff does not

anticipate it by broadly referring to an epoxy adhesive. If the Examiner is taking an inherency position, then he must set forth the technical reasoning behind such a position. A claimed feature is not inherent if it merely something that is possible.

For these reasons, claims 2 - 5 as amended herein are allowable.

With regard to the rejection of claims 6 - 18, it should be noted that the Bennett, Chee et al., and Torres patents do not cure the above noted deficiencies of Cundiff. It is also noted that none of the references teaches or suggests forming any helicopter component from the claimed self-extinguishing composite structure. The Bennett patent is directed to a highway vehicle fuel tank structure. Therefore, there is absolutely no teaching or suggestion of forming a helicopter component, such as those set forth in claims 7 - 13 using the claimed self- extinguishing composite structure. The Torres patent, in FIG. 1, shows a fuselage 10, framed by bulkheads 12 and stringers 14 enclosed by sheets of aluminum 16. Thus, there is nothing in FIG. 1 in Torres which teaches the use of fire preventive panels. In fact, Torres teaches away from the claimed composite structure of the present invention because it teaches applying a closed cell foam material to the aluminum 16, which material does not burn. There is no teaching of a honeycomb core with cells filled with a fire resisting material. There is also no teaching or suggestion of forming the helicopter components set forth in claims 7 - 13 from the claimed self-extinguishing composite structure. With regard to the Chee et al. patent, it does not teach or suggest forming helicopter components from the claimed composite material. In particular, it does not teach or suggest the helicopter components et forth in claims 7 - 13 from the claimed self-

extinguishing composite structure. Still further, none of the cited and applied references teach or suggest the claimed epoxy structural film adhesive of claim 14, the adhesive of claim 15, and the plurality of plies bonded to first and second surfaces by an epoxy structural film adhesive of claim 16.

For these reasons, the rejection of claims 6 - 18 should be withdrawn.

With regard to the rejection of claims 19 and 20, the mere fact that a particular material is known in the art is not sufficient to establish a prima facie case of obviousness. There must be something which would motivate one of ordinary skill in the art to substitute the known material for some other material being used. The Examiner has not set forth any reason why one of ordinary skill in the art would be motivated to use a 350 degree Fahrenheit curing epoxy structural film adhesive in the Cundiff structure.

With regard to the rejection of claim 21, this claim is allowable for the same reasons that claim 6 is allowable. This claim is also allowable because none of the cited and applied references teach or suggest forming an access or egress component from the claimed self-extinguishing composite material.

For the foregoing reasons, the instant application is believed to be in condition for allowance. Such allowance is respectfully requested.

Should the Examiner believe an additional amendment is needed to place the case in condition for allowance, he is hereby invited to contact Applicants' attorney at the telephone number listed below.

A notice of appeal and a check in the amount of $500.00 to cover the cost of the appeal fee is enclosed herewith. The

Examiner is requested to enter the instant amendment for the purposes of appeal should he maintain the rejections of record. The instant amendment does not require any further consideration and/or search by the Examiner and does not include any new matter.

Should the Director determine that an additional fee is due, he is hereby authorized to charge said fee to Deposit Account No. 02-0184.

Respectfully submitted,

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By _____

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I, Nicole Motzer, hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313" on **March 14, 2005**.

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